

2014 Wind Cooperative of the Year Award

Sponsored by the U.S. Department of Energy

The 2014 Wind Cooperative of the Year Award will honor one electric cooperative for its leadership in wind power. All electric cooperatives that are members of the National Rural Electric Cooperative Association (NRECA) are eligible to apply. Cooperatives can nominate themselves or other systems and there is no cost to enter. The Wind Cooperative of the Year Award is sponsored by the U.S. Department of Energy (DOE) in partnership with the NRECA.

This year marks the fourteenth anniversary of the award. Since the program's inception, winners have included Old Dominion Electric Cooperative, Rural Electric Convenience Cooperative, Iowa Lakes Cooperative, Minnkota Power Cooperative, Kodiak Electric Association, Wolverine Power Supply Cooperative, Alaska Village Electric Cooperative, Associated Electric Cooperative, Illinois Rural Electric Cooperative, Western Farmers Electric Cooperative, Holy Cross Energy, Basin Electric Power Cooperative, Great River Energy, East River Electric Power Cooperative, and Golden Valley Electric Association. The 2014 winner(s) will be recognized at the NRECA [TechAdvantage Conference](#) in Orlando, Florida on February 23 to 26, 2015. Please submit nominations (using page two of this nomination form) to:

Randy Manion
Desert Southwest Region
Western Area Power Administration
PO Box 6457
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720-201-3285
manion@wapa.gov

Due Date

All nominations are due by close of business on January 5, 2015.

Additional Information

Entries will be judged in four areas:

- Corporate leadership
- Innovative marketing
- Benefits to customers
- Project creativity.

Page two of this form must be used as the template for all nominations, and responses should not exceed 1000 words. Graphics of the project and innovative marketing materials may be submitted as attachments. Nominations exceeding 1000 words may be penalized in the judging process.

For additional information, call Randy Manion, Western Area Power Administration, at 720-962-7423 or manion@wapa.gov.

Nominator Contact Information

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Relationship to nominee: Supervisor

Nominee Contact Information

Name: Robert (Rob) Wolaver
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Nominee Communications/Public Relations Contact

Name: Drew Kramer
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Why are you nominating this organization? (In 1000 words or less, please describe how this electric cooperative has demonstrated corporate leadership with wind power; any innovative marketing or customer education associated with wind power at this cooperative; how customers have benefited from the cooperatives involvement in wind power; and any creative solutions to barriers the cooperative faced in securing wind power. Please include information regarding the year the cooperative started considering wind power and the percentage of contribution wind provides to its total power supply):

If the cooperative you are nominating has external requirements to develop, purchase, or otherwise promote renewable energy to (a) meet renewable energy portfolio standards, (b) satisfy fines or penalties, and/or (c) settle lawsuits or other litigation, please so indicate in this form.

~~If you are nominating the cooperative but are not an employee of the organization, please confirm whether or not the cooperative has reviewed and approved all the information on this form.~~ NA

Tri-State is a not-for-profit wholesale power supplier owned and governed by the 44 rural distribution cooperatives it serves across Colorado, Nebraska, New Mexico and Wyoming. Founded in 1952, Tri-State today provides affordable, reliable power to approximately 1.5 million consumers across a 200,000 square-mile service territory comprising some of the West's most rugged landscapes. Wind power plays a crucial role in our mission by diversifying our fleet and offering us experience managing variable resources. Wind also helps us meet renewable power mandates for cooperatives in effect in Colorado and New Mexico. Today, renewable resources generate more than 20 percent of the energy Tri-State provides to its member systems, with wind contributing approximately four (4) percent of the total.

Tri-State's earliest forays into wind power involved purchasing it from other utilities. In 1998, the company began purchasing power from a Wyoming wind site under an interim agreement with PacifiCorp. A year later, Tri-State signed a 15-year agreement to purchase energy from Platte River Power Authority's wind farm near Medicine Bow, Wyoming. As a member of Basin Electric Power Cooperative, Tri-State also receives wind generation from Basin's Prairie Winds Program.

Tri-State's first experience pursuing a utility-scale wind power project came in July 2009, when the company entered into a 20-year agreement with a subsidiary of Duke Energy Corp. to purchase the output of a 51-megawatt wind farm in east-central Colorado. The Kit Carson Windpower Project was completed in November 2010 and is comprised of 34 1.5-megawatt General Electric turbines on a 6,000-acre site northwest of Burlington, Colorado – within the service territory of Tri-State member co-op KC. Electric Association. In 2011, its first full year in operation, Kit Carson generated 186,190 MWh of energy at a 41.7 percent capacity factor. The facility can generate enough electricity to power the requirements of 12,000 to 14,000 homes.

In pursuing the Kit Carson Windpower Project, Tri-State's initial challenge was developing effective procurement and contracting processes for a new type of resource. This required developing and negotiating solutions to new issues related to variable resources – such as forecasting processes, curtailment procedures and transmission line outage coordination plans. In addition, Tri-State needed to develop a special operating agreement to manage thermal resources in the region until upgrades to the transmission system in the area were completed.

Fifty-seven years passed between Tri-State's founding and the establishment of the company's first utility-scale wind project, but the company's second venture came much more quickly. In February 2012, Tri-State signed a 20-year power purchase agreement to buy all of the output from the 67-megawatt Colorado Highlands Wind farm in northeastern Colorado. The 6,640-acre site, which is owned and operated by Colorado Highlands Wind, LLC, began commercial operation on Dec. 6, 2012.

Less than a year later, in October 2013, the Colorado Highlands Wind project expanded by adding an additional 14 1.7-megawatt GE turbines; this increased the facility's total current capacity by 36 percent to a total of 91 megawatts. Today it has a total of 56 generators equipped with the latest industry technology, including the longer 100-meter blade diameter for maximum performance and efficiency and "smart" turbine blades designed with built-in wind velocity sensors that trigger real-time blade pitch adjustments as the wind velocity varies. Estimated annual energy output is 400,000 megawatt-hours, which roughly translates to electric service for up to 27,000 homes. The wind farm is located about 25 miles northeast of Sterling, Colorado, where it receives station electric service from Tri-State member Highline Electric Association.

In February 2014, Tri-State announced it had signed a 25-year power purchase agreement with Carousel Wind Farm, LLC (a subsidiary of NextEra Energy Resources) for the output of a 150-megawatt wind-powered generating facility planned to be built near Burlington, Colorado. When complete and online in 2016, the Carousel Wind project will include 88 General Electric turbines and will have an expected annual energy production of approximately 650,000 MWh/year – it will be the company's largest wind energy PPA to date. As with Tri-State's other wind projects, Carousel will benefit the 44 member cooperatives and their member-owners by providing cost-effective power that contributes toward a steadily growing renewable portfolio and that allows Tri-State to meet state mandates under financial and operational terms favorable to the association.

In the fall of 2014, Tri-State issued an RFP seeking renewable energy projects with capacity ratings ranging from 20 MW to 150 MW. The company received more than 70 proposals by the November 14th response deadline, including project technologies featuring wind, solar and geothermal resources. Tri-State is currently evaluating a short list of projects and hopes to commence negotiations on project agreements in early 2015.

Finally, recognizing that its members have a unique opportunity to participate in community-based renewable energy projects, Tri-State's board adopted a first-of-its-kind in the nation program that incentivizes the development of local projects within its members' service territories. The initiative enables Tri-State members to make investments that diversify their resource base while helping to meet state renewable requirements. Tri-State members systems to date have 42 projects in place or under development, including one wind project located in Tri-State member San Isabel Electric Association's service territory. This 8MW wind project, the Huerfano River Wind Farm, achieved commercial operation in August 2013 and is expected to generate 21,000 MWh per year using 4 Sany turbines. In addition, nine member cooperatives are participating in Tri-State's program through wind net metering systems, serving a combined total of 64 participating member-owners.

Regarding marketing and customer education, Tri-State is committed to keeping its 44 member systems informed about current renewable opportunities. Operating across 200,000 square miles and four states, Tri-State has many other stakeholders interested in its wind power programs and other operations – from policymakers and regulators to community leaders, business associations, tribal entities and citizen's groups. As such, the company makes a concerted effort to communicate its progress through traditional media, online properties (eg, corporate website and blog, Facebook page, Twitter and Flickr accounts), community meetings, participation in community and business events, and other channels.

Optional additional information (not counted against 1000 word limit):

A. Location of wind generation and year installed:

Kit Carson Windpower Project: Northwest of Burlington, Colorado; completed November 2010

Colorado Highlands Wind Project: Northeast of Sterling, Colorado; completed December 2012, expanded September 2013

Carousel Wind Project: East of Burlington, Colorado; expected completion date of 4Q 2016

B. Project budget, including a short description of any innovative financing methods:

Kit Carson Windpower Project: 20-year power purchase agreement with Kit Carson Windpower, LLC

Colorado Highlands Wind Project: 20-year power purchase agreement with Colorado Highlands Wind, LLC

Carousel Wind Project: 25-year power purchase agreement with Carousel Wind Farm, LLC

C. Challenges of the development or purchasing process—this could include market interruptions, internal hurdles and/or buying a new technology:

D. Any other interesting information about the project or wind power purchase: